

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions:

1. - 17. (Cancelled)

18. (Currently Amended) An apparatus comprising:
a skin of a computing device, said skin comprising a conductive material;
and
a slot in the skin, said slot comprising a slot antenna, wherein the slot
antenna comprises a sector slot antenna having a directional radiation pattern,
wherein the sector slot antenna comprises a first sector slot antenna in a sector
antenna system, said sector antenna system further comprising:
a second sector slot antenna in the skin, said second sector slot antenna
having a directional radiation pattern in a different direction than the first sector
slot antenna.

19. (Currently Amended) The apparatus of claim 18, said sector antenna
system further comprising:

a plurality of additional sector slot antennas in the skin, each of the
plurality of additional sector slot antennas having a directional radiation pattern
covering a different sector surrounding the computing device.

20. (Currently Amended) The apparatus of claim 18 wherein the first sector slot antenna has the directional radiation pattern for multiple resonant frequency bands.

21. (Currently Amended) The apparatus of claim 18 further comprising:
a tuning element coupled to the slot, said tuning element to tune a secondary frequency for the slot antenna.

22. (Original) The apparatus of claim 21 wherein the tuning element comprises a stub capacitor.

23. (Currently Amended) The apparatus of claim 18 further comprising:
a third sector slot antenna having a same directional radiation pattern as the first sector slot antenna, said first sector slot antenna and said third sector slot antenna comprising a diversity antenna.

24. - 28. (Cancelled)

29. (Currently Amended) A system comprising:
a notebook computer;
a skin covering at least a portion of the notebook computer, said skin comprising a conductive material; and

a slot in the skin, said slot comprising a slot antenna, wherein the slot antenna comprises a sector slot antenna having a directional radiation pattern,
wherein the sector slot antenna comprises a first sector slot antenna in a sector antenna system, said sector antenna system further comprising:

 a second sector slot antenna in the skin, said second sector slot antenna having a directional radiation pattern in a different direction than the first sector slot antenna.

30. (Currently Amended) The system of claim 29, said sector antenna system further comprising:

 a plurality of additional sector slot antennas in the skin, each of the plurality of additional sector slot antennas having a directional radiation pattern covering a different sector surrounding the notebook computer.

31. (Currently Amended) The system of claim 29 further comprising:

 a third sector slot antenna having a same directional radiation pattern as the first sector slot antenna, said first sector slot antenna and said third sector slot antenna comprising a diversity antenna.

32. (Original) An apparatus comprising:

 a skin of a computing device, said skin comprising a conductive material;
 a first slot in the skin, said first slot comprising a first sector slot antenna having a radiation pattern in a first direction;

a second slot in the skin, said second slot comprising a second sector slot antenna having a radiation pattern in a second direction;

 a third slot in the skin, said third slot comprising a third sector slot antenna having a radiation pattern in a third direction; and

 a fourth slot in the skin, said fourth slot comprising a fourth sector slot antenna having a radiation pattern in a fourth direction.

33. (Original) The apparatus of claim 32 wherein the first, second, third, and fourth sector slot antennas have a primary resonant frequency and a secondary resonant frequency tuned for two different wireless communications standards.

34. (New) The apparatus of claim 18 wherein the conductive material comprises an outer layer of the skin in at least a vicinity of the slot of the first sector slot antenna.

35. (New) The apparatus of claim 34 wherein the outer layer comprises one of a conductive coating and a conductive mesh.

36. (New) The apparatus of claim 34 wherein the slot of the first sector slot antenna extends through only the outer layer.

37. (New) The apparatus of claim 34 wherein the slot of the first sector slot antenna extends through multiple layers of the skin.

38. (New) The apparatus of claim 18 wherein the skin is made entirely of the conductive material.

39. (New) The apparatus of claim 18 wherein the computing device comprises one of a notebook computer, a tablet computer, and a handheld computer.

40. (New) The apparatus of claim 18 wherein the computing device comprises at least one of a base and a lid, and wherein the slot of the first sector slot antenna is located in at least one of an edge of the base, an edge of the lid, an outside of the lid, an inside of the lid, through the lid, and through the base.

41. (New) The apparatus of claim 18, said first sector slot antenna comprising a cavity behind the slot, said cavity having a depth of approximately one-quarter of a wavelength of a resonant frequency of the first sector slot antenna.

42. (New) The apparatus of claim 18, said first sector slot antenna comprising an impedance plane coupled to the skin under the slot of the first sector slot antenna.

43. (New) The apparatus of claim 42 wherein the impedance plane comprises an Artificial Magnetic Conductor (AMC).

44. (New) The apparatus of claim 42 wherein the impedance plane comprises a multiple band impedance plane, said multiple band impedance plane to act as a magnetic conductor for a primary resonant frequency and a secondary resonant frequency of the slot.

45. (New) The apparatus of claim 18 wherein the first sector slot antenna has a primary resonant frequency and a secondary resonant frequency.

46. (New) The apparatus of claim 45 wherein the primary resonant frequency and the secondary resonant frequency are tuned for two different wireless communications standards.

47. (New) The apparatus of claim 46 wherein the two wireless communications standards comprise at least one of Bluetooth, 802.11a, 802.11b, and 802.11g.

48. (New) The apparatus of claim 18 wherein at least one of a thickness of the skin in a vicinity of the slot, a width of the slot, a length of the slot, and a tuning element at a feed point of the slot are tuned to achieve at least one of a target impedance and a primary resonant frequency of the slot.